

THE DEVIL IS IN THE DETAIL: Museum Displays and the Creation of Knowledge

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ABSTRACT

This paper presents a methodological framework for conducting research on the knowledge-making capacity of museum displays. As active agents in the production of knowledge, museum displays are increasingly being recognized as documents of significance to the history of scholarly disciplines and the evolution of ideas. In order to investigate how exhibitions create knowledge, a basic outline of some of the key attributes involved in creating meaning in exhibitions is offered. Building on research in exhibition analysis, the history of collecting, and archaeological representation, this account emphasizes how there is a complex network of factors that warrant consideration when assessing the epistemological function of museums. [Keywords: strategies, exhibition analysis, museums and knowledge]

For many people, museum displays require little explanation. Designed to present collections and tell stories about the significance of the objects contained within them, museum exhibitions are typically seen as providing opportunities to see "treasures" from times long gone, or as useful educational aids for informing the public about science, culture, and the natural world. Although museum studies researchers have long been aware of the power of museum displays to create compelling narratives about the world and its inhabitants, both nonspecialists and the public still tend to see museums as key instruments in the diffusion of specialist knowledge to lay audiences. Furthermore, while within the field of museum studies there is wide recognition of the important role museums play in communicating ideas, there is a general lack of awareness in other fields about the extent to which exhibitions *create* knowledge about the subjects they seek to represent. For over 20 years, an extensive literature on exhibition critiques in museum anthropology has been offering insights on how displays define culture (Ames 1992; Coombes 1994; Dubin 1999, 2006;

Fienup-Riordan 2005; Henderson and Kaeppler 1997; Kaplan 1995; Karp and Lavine 1991; Kreps 2003; McLoughlin 1999; Peers and Brown 2003). Influenced by this growing body of work, archaeologists have begun to address how exhibitions define past societies, demonstrating that museum displays have a significant role in the formation of disciplinary knowledge (Moser 2006; Scott 2007). This recent work on the epistemological significance of exhibitions is situated within a wider research tradition that examines the representation of the past in nonscholarly discourse (see Moser 2001, 2008). Like researchers in museum anthropology, specialists in archaeological representation have challenged the oft-held assumption that exhibitions are the by-products of research, translating the ideas of academe into a comprehensible format for nonacademics. As active agents in the construction of knowledge, museum displays are increasingly being recognized as discrete interpretive documents of great significance to the history of scholarly disciplines and the evolution of ideas.

Since early modern collectors began arranging their collections for the purpose of being seen by visitors, an interest in display was apparent (see MacGregor 2007; Moser 2006:11–32). Although few chose to write about strategies for display, the ways in which objects were presented was of immense importance in imparting identities upon collections. This realization was critical to the establishment of museum studies as a field of study and was greatly elaborated upon in the 1990s, when scholars laid down the theoretical foundations for exploring how objects are made meaningful in a museum context (Ames 1992; Bennett 1995; Hooper-Greenhill 1992; Macdonald 1998; Macdonald and Fyfe 1996; Pearce 1994, 1998; Simpson 1996; Vergo 1990; Walsh 1992). With increasing specialization in the museum sector, the creation of exhibitions has become the province of specialist designers and educators who focus on communicating key messages via a vast array of display strategies. Although this development reflects wider recognition of the significance of museum display as an area requiring special expertise, the complex mechanisms according to which displays generate ideas warrants scholarly attention.

Comments made by museologists concerning the changing role of exhibitions support this claim. Roberts (1997:74–75), for instance, argues, "The very nature of museums exhibit function has been altered.

Once a seemingly straightforward matter of displaying collections, exhibitions can now be viewed as an eminently interpretive endeavor: not just that the information exhibits present is subject to multiple interpretations, but the very act of presentation is fundamentally interpretive." Similarly, Falk and Dierking (2000:127) observe how there has been a "move away from the concept of exhibitions as merely spaces for visually displaying objects to the view of exhibitions as environments in which visitors experience art, history, nature, or science." More recently, Swain (2007:217) has observed, the basic tools of museum communication are objects, words, pictures, and "assorted props that can be used to stimulate the different senses. . . . Added to this is something that is less easy to define. It is the way words, objects, and pictures are combined and grouped and added to by such elements as space, light, and colors—props that help create a context, atmosphere, and ambience for displays." Despite this awareness, detailed investigation on how the attributes of exhibitions work together to create knowledge is lacking. Although many researchers have highlighted particular aspects of the exhibitionary environment as being important in the communication of ideas, such as space, lighting, and the composition of text (e.g., Lindauer 2006), guidance on assessing their impact is limited.

In order to demonstrate the powerful knowledge-making capacity of museum displays, it is necessary to consider the diverse range of factors involved in the production of exhibitions and how these influence visitor understanding of particular subjects. In addition to identifying the critical components of displays, it is also important to establish how these components complement and reinforce each other in a system of representation. While often seen as "props," details such as lighting, display furniture, and spatial arrangement function as devices that work together to create an environment within which visitors gain understandings of culture, history, and science, as well as concepts such as "civilization," "progress," "race," and "gender." To demonstrate how the technologies of presentation deployed in museums are integral to the formation of knowledge, a basic outline of the categories that might be considered when analyzing museum displays is presented.

This outline is not intended to be definitive or prescriptive; it is merely offered to give guidance and suggestions to those wishing to explore the complex relationship between content and methods of presentation in museum exhibition. It is fully recognized that contexts for analysis will greatly vary, as there is an infinite variety of factors affecting the way displays are constructed and interpreted. Exhibitions are created in many different types of contexts and with many different types of aspirations, and although the impact of particular elements can significantly differ, with some elements generating significant meanings in some exhibitions and not in others, it is still useful to assemble a list of the elements that are related to the creation of meaning in museums. Furthermore, it is important to emphasize that the list of attributes presented below is by no means comprehensive; as Lord and Lord (2002:14) observe, "a legion of specialists is now ranged to address the complexities of exhibitions" and thus there are many aspects of exhibition not addressed here that may also be considered, including marketing strategies, outreach activities, audio-guides, education programs, and merchandizing. Finally, the criteria delineated in this paper are different from those articulated by professional exhibition practitioners. In seeking to improve exhibitions, practitioners have established appropriate criteria for assessing exhibition excellence that focus on visitor experience. Although it is not their aim to evaluate the design and content of exhibitions, such practitioners acknowledge that "design plays a crucial role—not just in presenting content, but in actually creating it" (Serrell 2006:33).

The examination of museum displays and how they construct knowledge requires a combination of theoretical and methodological skills. Objects, texts, and audio-visual media work both independently and together to convey meanings, and thus museum analysis is a truly interdisciplinary enterprise. Beyond having a basic understanding of visual and textual analysis, investigators should also be aware of key concepts in spatial analysis, design history, and the history of collecting. More specifically, in determining how displays contribute to the creation of knowledge, it is necessary to carry out research on who was responsible for designing the exhibit(s) in question and to find out about their educational or professional background. It is also important to know

about the nature and history of the collection being exhibited, the motivation and aims behind the selection of the topic(s) for presentation, the basis upon which objects were chosen for display (including what was excluded), and the intended audience and planned learning outcomes (if any). For historic displays, archival sources provide little information on such areas; however, it is possible to piece together some idea of the underlying rationale for creating exhibitions from primary materials held in museum archives and collections of personal correspondence. When turning to the analysis of the displays, there are a number of general categories that should be considered and specific questions that can be asked. Beyond looking at what is physically on display, it is necessary to consider all the details of the display environment in which collections are presented. As noted above, this is not an exhaustive list—any number of details, however insignificant, can inform us about the theoretical, political, and intellectual values at the heart of an exhibition. Furthermore, while many elements appear to have little significance when examined in isolation, they can assume great importance in making statements about a subject when considered in relation to other details. Because of limitations of space, detailed use of examples relating to each of the categories outlined below is not possible; however, relevant case studies illustrating their significance are cited in the text.

Architecture, Location, Setting

The architectural style of the building in which exhibitions are presented, and the location and setting of museums are key factors in evaluating the epistemological significance of museum displays. As noted by Lord and Lord (2002:69), visitor experience “begins as the visitor approaches and enters the museum,” with the physical reality of the site, the architectural presence of the museum, and its location all conveying messages about the contents of the museum. The features and iconic status of museum buildings are important because they can influence how collections are perceived, as can the location of museums in cities or rural environments, and in purpose-built structures or reconstructed ancient sites. Exhibitions housed in great neoclassical buildings, for instance, imbue displays with a degree of authority and influence. Neoclassical architecture has a legacy and

presence that informs visitors they are entering a “Temple of Learning,” and that what they see is important and true. Such buildings can have particular significance for shaping the way Western and non-Western cultures are perceived. For example, the iconic neoclassical museum building is a monument that celebrates the imperial age of the 19th century, symbolizing the power and control of the European nations that amassed antiquities and ethnographic collections from all corners of the globe.

While displays of antiquities held in such buildings can assert the cultural superiority of the nations whose artistic style resembles that of the museum, collections of ethnographic material assume an identity relating to the historic context and symbolic meaning of such structures. Other great national museums built in the gothic style, like cathedrals, assert a sense of history and tradition that sees exhibits assume a role in celebrating national history and the achievements of nations (Sheets-Pyenson 1988; Yanni 2005). Contrary to this, exhibitions housed in modern purpose-built buildings can lend a contemporary “feel” to an exhibition, suggesting to visitors that the displays they see are more of the present and a challenge to tradition (MacLeod 2005).

In considering the impact of museum architecture on displays, questions that might be asked include: How does the architecture relate historically and culturally to the display? Does the style of the building emphasize a cultural contrast between the “host” or custodian of the collection and the objects on display? Does the architecture assign an integrity or authority to the display, or indeed undermine it?

Space

The space in which exhibitions are laid out is a fundamental part of the way displays are perceived. Space does not simply refer to the physical parameters of the room in which objects are displayed, but includes consideration of the way visitor movement is directed or guided within that space. The spatial aspects of display also refer to exhibition layout, which is discussed below. As Falk and Dierking (2000:123) observe, at the “level of the exhibit, at the level of the exhibition, and finally at the level of the building, the visitor’s experience is influenced by the creation of space.” Furthermore, as Swain (2007:226) notes, “use

of space influences which parts of the exhibition are used and viewed and in which ways."

In most cases displays are created in spaces that already exist, and the nature and character of these spaces can affect both the selection of material and the way it is displayed. There are also many instances where display spaces are purpose-built for exhibitions and here we see how the features of such spaces can be used to reinforce and complement aspects of the display and its messages. A basic starting point for analysis is the size of the gallery or rooms in which the displays are presented and a comparison of the primary and secondary exhibition areas within exhibitions. While displays in large galleries can appear more grand and thus assume more importance and authority, those in small rooms can offer a "scale of viewing" that is more intimate and less intellectually intimidating. Furthermore, in large galleries, displays can adopt a more public character where visitors get a sense of the "big picture," whereas displays in smaller rooms can offer visitors a more private way of engaging with "subplots" within the larger narrative. Related to this is the way in which large open spaces enable visitors to see the whole exhibition at a glance, an experience that can in itself be highly visual or esthetic. In this sense, large spaces can be seen as more impersonal, focusing on the presentation of grand authoritative accounts, while small galleries offer "stories" that can be engaged with on a more personal and questioning level.

In current museological practice, a key concern is to create spaces that enhance the experience for the visitor and facilitate effective absorption of the exhibition message. This typically results in the demarcation of a variety of spatial zones, each of which can have an impact on the ways the displays are interpreted. For instance, visitors' responses to the types of spaces in which they see displays presented can be "transferred" to the very subject being treated in the display. Viewing rows of artifacts in large galleries, for example, endows these objects with a sense of detachment where they are seen as representatives of a wider historical sequence or system. In contrast, viewing one statue in a small room can result in the object being perceived in a more familiar way and suggest the culture represented was less formal than assumed. Similarly, objects lined up along the wall in long thin galleries can encourage visitors to walk past

in a parade-like fashion and imbue the collection with a sense of formality and military-like structure. The same objects presented in a less systematic manner in a circular space can encourage a less detached impression of the culture being portrayed. In this sense, visitors might feel more connected to cultures represented in such a way and, accordingly, feel more comfortable about judging their attainments.

In analyzing the nature and qualities of the spaces in which displays are accommodated, the following questions might be asked: What is the size and shape of rooms used? Is there a clear demarcation between primary and secondary display spaces? What kind of entrance space is used? Are different parts of the collection accorded different types of rooms? Are the rooms of equitable size with other galleries displaying related collections? Do visitors see the entirety of displays at a glance or are some displays obscured so as to enhance their impact?

Design, Color, Light

A critical factor in display analysis is the "look" or design quality of the galleries and rooms in which exhibitions are presented. This aspect of display is important because styles of decoration can situate or contextualize the objects on display, or, alternatively, clash or contrast with the exhibits. In historic buildings, design schemes that have been retained to complement the architecture can be incompatible with the message of the exhibition and imbue the objects with a sense of discordance. Like museum architecture, the features of gallery interiors and range of design elements used to present collections can reinforce the cultural status of societies on display or present them as alien and inferior. For example, classically inspired ceilings can assert the esthetic appearance of antique statuary or emphasize the perceived "primitive" qualities of indigenous art. Interior design elements are also important in conveying a sense of atmosphere, with more ornately decorative schemes providing a visually appealing setting that in itself can be a feature of the display and neutral schemes imparting the collection with a more modern "minimalist" feel.

Display furniture is also relevant here as cabinets, shelves, plinths, pedestals, and stanchions can situate objects and cultures within a particular intellectual framework. For instance, historic wooden cabinets

can define objects as curiosities. Ultramodern designer cases in steel and glass, in contrast, can impart objects with an identity as commodities—encouraging us to see them like consumer products in a shop window. Museum designers have become increasingly aware of the potential of design elements in enforcing exhibition messages, advocating design schemes that are esthetically compatible with the topic. For example, Serrell (1996:162) suggests that an exhibition on recycling would get the message across more effectively if constructed in recycled materials as opposed to being presented in glitzy steel and neon. The kinds of questions that might be asked concerning room design include: Is the collection housed in a major gallery endowed with strong design features, or in a smaller room or set of rooms with less ornate decoration? Have new decorative elements been introduced in association with the installation of the collection? How does the decoration relate to the objects on display? Has a style of decoration been used to enhance the esthetics of the display? How are the ceilings, floors, and walls decorated?

Use of color is a key component in the design of display spaces. The coloring of the walls of the room in which collections are arranged and of the other features of the display can lend a particular meaning or association to objects and affect visitors emotionally. Color palettes can endow exhibitions with symbolic significance and evoke historical periods, such as red for exhibitions on Chinese artifacts. Furthermore, the choice of color can also convey a mood that might enhance or contradict the message of an exhibition. On the impact of color one might ask: Was a particular color chosen in order to elicit a response from visitors or as a neutral backdrop? Does the choice of color represent general trends in museum design or contemporary design, or is it based on the nature of the topic?

Use of light in the display environment is also of importance in bestowing meanings on objects. As observed by Lord and Lord (2002:437–438), light is a “key interpretative tool. Subtle variations in light level, color, direction, and intensity provide visual clues that can almost subliminally inform the exhibition visitor about time, place, and other pieces of contextual information.” In addition to guiding visitors, use of light creates atmosphere or ambience, and the light’s source, direction, and intensity can have a sig-

nificant effect in defining objects as important, high-status artifacts, as esthetic “masterpieces,” or as mundane examples representing a general class of objects. For instance, the individual lighting of objects elevates their status, suggesting these items should be revered and respected, whereas poorly lit objects are perceived as less significant. Similarly, the way in which rooms are lit can inform us whether the collection is treated differently from other collections. Darkly lit rooms, for instance, can promote a sense of wonderment and serve to define objects or collections as mysterious and intriguing. Questions that could be asked in relation to lighting include: What type of lighting arrangement was provided for the collection? What effects do both artificial and natural lighting have on how the objects appear (e.g., top-lighting, side-lighting, windows, skylights)? How are particular objects or groups of objects singled out through lighting strategies? Does the lighting lend a particular interpretation of the displays?

Subject, Message, Text

The subject and message of any exhibition and how it is presented in textual accompaniments to the displays is a critical factor that needs to be considered in museum display analysis. Although those exhibitions seeking to display a representative sample of a museum’s collection, and which thus present broad coverage of a subject, can appear to be less message-laden than exhibitions with a specific theme or story, this is not always the case. Exhibitions aiming to be informative in a general way can often impart ideas that are not immediately apparent. Similarly, for those exhibitions based on a theme or message, ideas beyond those explicitly intended may be conveyed. For instance, structuring the arrangement of objects in a chronological as opposed to thematic manner can make statements about the level of cultural attainments of particular cultures. Visitors can interpret collections presented in this way in terms of the “rise and fall” of civilization or, similarly, as symbols of progress or decay. Witcomb (2003:128) critiques this traditional practice of presenting a singular narrative where visitors are encouraged to move through the exhibition in one direction, following a clear sequence of exhibits. As opposed to this, thematic exhibitions can single out and highlight particular subsets of material, encouraging visitors to

take a more active role in interpreting aspects of a culture they find meaningful.

More explicit messages about the subjects and messages underlying exhibitions can be communicated by the text used to accompany displays. Beyond analyzing the information imparted in such texts and the way in which particular "facts" have been selected at the expense of others, it is important to consider the style of writing and how this may affect the perception of the subjects. For instance, text written in an academic and scholarly way can impart an elevated status upon objects, emphasizing how special expertise is required to understand them. Exhibitions using this style have an authoritative voice, which, beyond assigning the objects with a sense of importance and intellectual value, can intimidate visitors and render them more passive in their interaction with the exhibition. Contrarily, a journalistic style can impart objects with a more accessible nature, facilitating greater visitor engagement.

Discussions on the use of text in exhibitions have emphasized how museum displays should not present text in a "book-like" way (e.g., Moore 1997). They have instead encouraged use of more "interpretive" approaches to writing exhibition text, which make clear the "big idea" at the heart of the exhibition (Serrell 1996). Here, objects are not simply presented in terms of their original function, but take on an identity as useful "didactic aids." For example, if the politically sensitive context in which skeletal remains have been studied is referred to in text panels accompanying human bones, these objects instantly become powerful statements on the study of human history and evolution (on the representation of race in museums, see Scott 2007). Furthermore, the style or appearance of the text can impart meanings on objects; traditional fonts reinforce the conservative nature of some topics, whereas the use of modern typography can confer a contemporary, pop-culture status upon objects.

The types of questions one might ask in order to establish how exhibition text functions to create meaning include: To what extent has text been used in the exhibition? Who has written the text and is their authorship apparent? What are the sources for the text? Is the style of writing scholarly or more creative and prose-like? Is the text informative and descriptive or does it offer interpretations and opinions? Has visitor input informed the writing of the text? What kind of

titles and subtitles are used—descriptive, catchy, or questioning? What is the graphic style of the text? What is the nature of the introductory or orientation text and how does it set the tone of the exhibition and give a sense of what lies ahead? Finally, have supplementary leaflets, floor plans, and visitor guides been used and, if so, how do they advance the message of the exhibition?

Layout

The ways in which an exhibition's different components are laid out in rooms and galleries is important in generating meanings about the topic or subject being represented. Decisions concerning the way a collection is structured and spatially distributed can create meanings about the relevant importance of objects and their identity as markers of cultural development. Although the Renaissance trend of using every available surface for display had the effect of designating objects as "curiosities," contemporary trends in limiting the number of items on display have emphasized the value of objects as informative documents for communicating specific meanings. The cluttering of objects and the "visual spectacle" approach to display layout can serve to define collections as treasure hoards. The minimalist art-gallery approach sees objects presented as esthetic icons and powerful symbols of cultural identity. Furthermore, strategies for the placement of displays within the exhibition space can render entire collections as relics and trophies or as illustrative aids in a historical narrative. For instance, certain display environments can see objects acquire a passive role, appearing as inanimate documents in a teleological account of cultural progress, while others can elevate them to be more active participants in the exhibition message.

The distribution of the components of the display and their relationship to each other is in itself a narrative that visitors subconsciously "read" when they move through an exhibition. For example, the arrangement of the displays suggests routes of movement, often encouraging visitors to focus more on one display or invest more time in looking at it than others. In this way, the interpretation of a subject can be affected, with particular objects being positioned in more striking or accessible positions, and others being relegated to less significant locations. Questions that might be asked in relation to room layout include: How are the displays arranged

within the room/exhibition space? How are the surfaces of this space used (e.g., walls, ceiling, floor)? Are the objects aligned or associated with each other via a particular formation (e.g., are they in rows or clusters)? Is the space between the objects regularized or is there no pattern? Are the objects distanced from each other or positioned very closely? How are particular objects or sets of objects connected or separated? Are the objects arranged esthetically (e.g., is symmetry a guiding principle for object layout)?

Associated with considerations concerning exhibition layout is the relationship of the layout of museum displays to that of other exhibitions in the same museum. Visitors often experience an exhibition in the context of viewing other galleries, and thus it is inevitable that they will make comparisons between them, either consciously or subconsciously. Additionally, elements of other galleries might be visible upon entering an exhibition, and the glimpses gained of other rooms and collections can affect what is being seen. Visual access to other exhibitions lying beyond or in immediate proximity to the displays being viewed often serves as a comparative device for visitor interpretation. For example, visitors standing in a gallery featuring dioramas of indigenous communities might catch a glimpse of ancient hominids in another gallery; this visual proximity might encourage them to see a connection between the two sets of displays, perceiving the cultural group on display as "primitive" or even "prehistoric."

Display Types

The range and types of displays in an exhibition offer insights into the subject being represented and can contribute significantly to the way it is defined. Although histories of museums have shown how different display types have been used to present different subjects (Alexander 1997; Barringer and Flynn 1997; Bouquet 2001), work on contemporary exhibitions outlines the extensive array of displays now used in exhibitions (Ambrose and Paine 2006; Belcher 1991; Caulton 1998; Dean 1997; Lord and Lord 2002). Beyond original objects or artifacts, a multitude of other display elements can be used, including reproductions or casts, modern material culture (often used as an interpretive aid for contextualizing ancient artifacts), graphics (including illustrations, maps, photographs, and pictorial and

computer reconstructions), models, dioramas, audio-visuals (video footage, soundtracks), interactives (computer presentations, educational activities, games), storytelling/re-enactment, audio-guides, sensory displays focusing on smell and touch, and modern artworks (used as an "intervention" or mode of dialog with antiquities, ethnographic, and natural history collections).

All of these elements of an exhibition are an integral part of the messages that are both intentionally and unintentionally communicated. For instance, habitat dioramas generate various statements about a species and its behavior (see Metzler 2008; Moser 1999, 2003; Quinn 2006), and historic photographs used in ethnographic exhibitions endow collections with a political dimension that can be provocative for visitors. Indeed, research on how displays have shaped views of cultural difference has been critical in establishing museum studies as an important subject in anthropology (Ames 1992; Coombes 1994; Henderson and Kaepler 1997; Kaplan 1995; Karp and Lavine 1991; McLoughlin 1999).

Questions that could be asked in relation to display types include: What is the range of display types used? Has this been determined in relation to the subject and intended audience? How do the displays function as interpretative aids (e.g., is an attempt made to contextualize objects)? Are the display types used in the exhibition distinctive to the collection and not typically used in the presentation of other types of collections? What is the role of images in comparison to other types of display? How have images been used in the exhibition (e.g., do they reinforce statements made in the text or are they iconic images used to attract attention)? What is the illustrative style used in the graphics?

Exhibition Style

Analysis of museum display requires consideration of what the type or style of an exhibition is and whether it has been created with a distinctive approach to learning styles. The literature on this subject is vast, and innumerable definitions of exhibition "types" can be found in the texts covering exhibition and education (Ames et al. 1997; Belcher 1991; Black 2005; Dean 1997; Falk and Dierking 2000; Hein 1998; Hooper-Greenhill 1991; Roberts 1997). Exhibition style revolves around the communicative role as-

signed to objects in exhibitions. Establishing the nature of this style is critical to any museum analysis.

For the purposes of outlining basic guidelines to carry out museum display analysis, some key observations on exhibition types can be noted. For instance, a distinction can be made between themed or idea-oriented exhibitions and those that are object-led. While the former makes selective use of collections in order to tell a story and is seen as more interpretive, the latter seeks to present a wider subject area using significant parts of collections and is perceived as more descriptive. This distinction is, of course, highly problematic, as general object-led exhibitions are just as selective as idea-oriented ones. Explicit messages about a topic may not have been intended by those curating and designing collection-based displays, yet implicit messages about classes of objects can often be conveyed. For instance, "everyday" objects, such as eating utensils, can be defined as rudimentary functional items, as opposed to being appreciated as signifiers of distinctive cultural behaviors.

Many critics have reacted to the way in which museums are using less of their collections and placing more focus on themed exhibitions (e.g., Spalding 2002). Beyond being a design-driven trend, this shift reflects the concern in museum education to communicate key ideas rather than to showcase collections. While recognizing the importance of museum displays in communicating ideas, many museologists assert that the most significant function of the museum is to provide people with the opportunity to encounter a three-dimensional object: "Bringing object and viewer close together is the most important function of museum exhibition" (Belcher 1991:38).

Similarly, the emotional potential of object-led exhibitions has been emphasized. Referring to the trend in many museums to put collections in storage and replace them with theatrical and interactive displays, Spalding (2002:23) asserts that artifacts can "help restore the gleam of wonder to our jaded gaze, and reinvigorate our appetite for experiencing life in all its ultimately unfathomable glory." Having said this, much has been written on the way museum objects are severed from their original contexts, and recent work on differences between Western styles of presentation and indigenous museums have highlighted this characteristic further. Kreps (2003:148, 149), for example, asserts that in in-

digenous museums, objects "remain ensconced in their larger cultural contexts," whereas in Western museums, objects are "assigned new generalized meanings and values as objects of 'ethnography' or 'art'" (see also Fienup-Riordan 2005; Peers and Brown 2003). Thus, the power of objects to "restore the gleam of wonder to our jaded gaze" (Spalding 2002:23) is a contentious issue. Although their impact as wondrous objects is important in stimulating visitor engagement, it has serious consequences for how history and culture are understood.

Other distinctions that can be made between exhibition types include didactic versus discovery types of exhibition, the former generally being concerned with presenting information and the latter being designed to facilitate visitors' exploration and engagement with the subject. Researchers in museum education have investigated how people learn in the museum environment and believe the didactic approach enables visitors to gain new understandings of particular subjects (Black 2005; Falk and Dierking 2000; Hein 1998; Hooper-Greenhill 1991; Roberts 1997). For instance, a didactic display will focus on identifying the learning objectives of the exhibition and design instructional sequences relevant to these. Based on the recognition of different learning styles, discovery-oriented exhibitions can see their subjects presented in more creative ways. With a strong emphasis on interactive modes of engaging with exhibits, discovery-based exhibitions can define topics in science, such as evolution, as highly relevant to our everyday lives in the present. Other exhibition types include esthetically oriented ones, where visitors are encouraged to see objects as artworks and where the visual impact of the object is important. With a lack of interpretive aids and the limitation of text to a minimum, esthetic exhibitions tend to define the artifacts on display as objects of beauty and can deny their status as historical and cultural documents. Finally, some exhibitions can be classified as contextual, immersive, or atmospheric (i.e., fully reconstructed exhibition environments), where efforts have been made to contextualize objects in relation to their original function and where visitors are encouraged to experience as opposed to passively observe displays (e.g., living museums peopled with re-enactors, social history museums with reconstructed street scenes).

Analytical questions that might be asked in relation to exhibition style include: Is there a clear sense

of exhibition style or have a combination of styles been used? How does the exhibition style confer meaning upon the objects on display? Is the style compatible with the subject? Does the learning style create understanding through association more than through the display of collections of objects?

Audience and Reception

The role of visitors in defining displays can never be underestimated. The way audiences engage with the displays and reflect upon these experiences plays a part in how the subjects represented in displays are defined. Research on audience and reception, which demonstrates how visitors assert their own assumptions and expectations on exhibitions, shows that audiences are part of the interpretive schema of exhibitions. Audience behavior and the reception of displays is part of the process because visitors bring their own biases and make their own choices concerning what they view in museums.

Growing interest in the visitor-centered approach to exhibition reveals how identification of audience concerns and interests has an impact on the content and presentation of exhibitions (Black 2005; Hooper-Greenhill 1994, 2001; Sandell 2002; Serrell 1996; Witcomb 2003). Information on the way visitors consume exhibitions can be obtained from a range of sources, and largely depends on whether displays are historic or contemporary. If it is a historic exhibition, illustrative material, media reports, and visitor accounts can be used; if it is a contemporary exhibition, a number of visitor analyses can be undertaken, including interviews, questionnaires, and visitor tracking studies.

Questions that can be asked here include: How do visitors engage with the displays? Are they deferential or do they appear comfortable and familiar with the subject matter and objects? How does visitor behavior affect other visitors viewing the galleries? How do visitors, both professional and nonprofessional, write about the displays?

Conclusion

The factors involved in defining subjects in museum exhibition are extensive, and the way they operate as part of a "knowledge network" is highly complex. Although museologists are all too aware of the power of exhibitions in communicating ideas, there is less recognition of the role museum displays have in cre-

ating ideas. Furthermore, although much has been written on the selection of appropriate exhibition elements to communicate ideas, there is a lack of reflection upon the importance of exhibition in contributing to intellectual developments.

Displays create new worlds for objects to inhabit and these worlds are full of "devilish details" that really matter when it comes to creating a system of meaning relating to the subject being represented. Far beyond being mere trifles in the scheme of manufacturing knowledge, the attributes of museum display have long asserted themselves as key epistemic devices.

References Cited

- Alexander, Edward P.
1997 *The Museum in America*. Walnut Creek, CA: AltaMira Press.
- Ambrose, Timothy, and Crispin Paine
2006 *Museum Basics*. 2nd edition. London: Routledge.
- Ames, Kenneth L., Barbard Franco, and L. Thomas Frye
1997 *Ideas and Images: Developing Interpretive History Exhibits*. Walnut Creek, CA: AltaMira Press.
- Ames, Michael
1992 *Cannibal Tours and Glass Boxes: The Anthropology of Museums*. 2nd edition. Vancouver: University of British Columbia Press.
- Barringer, Tim, and Tom Flynn, eds.
1997 *Colonialism and the Object: Empire, Material Culture and the Museum*. London: Routledge.
- Belcher, Michael
1991 *Exhibitions in Museums*. Leicester: Leicester Museum Studies.
- Bennett, Tony
1995 *The Birth of the Museum*. London: Routledge.
- Black, Graham
2005 *The Engaging Museum*. London: Routledge.
- Bouquet, Mary, ed.
2001 *Academic Anthropology and the Museum*. New York: Berghahn Books.

- Caulton, Tim
1998 *Hands on Exhibitions: Managing Interactive Museums and Science Centres*. London: Routledge.
- Coombes, Annie
1994 *Reinventing Africa: Museums, Material Culture and Popular Imagination in Late Victorian and Edwardian England*. New Haven: Yale University Press.
- Dean, David
1997 *Museum Exhibition: Theory and Practice*. London: Routledge.
- Dubin, Steven
1999 *Displays of Power: Memory and Amnesia in the American Museum*. New York: New York University Press.
2006 *Transforming Museums: Mounting Queen Victoria in a Democratic South Africa*. New York: Palgrave Macmillan.
- Falk, John H., and Lynn Dierking
2000 *Learning from Museums: Visitor Experiences and the Making of Meaning*. Walnut Creek, CA: AltaMira Press.
- Fienup-Riordan, Anne
2005 *Yup'ik Elders at the Ethnologisches Museum Berlin: Fieldwork Turned on Its Head*. Seattle: University of Washington Press.
- Hein, George
1998 *Learning in the Museum*. London: Routledge.
- Henderson, Amy, and Adrienne Kaeppler
1997 *Exhibiting Dilemmas: Issues of Representation at the Smithsonian*. Washington, DC: Smithsonian Institution Press.
- Hooper-Greenhill, Eileen
1991 *Museum and Gallery Education*. Leicester: Leicester University Press.
1992 *Museums and the Shaping of Knowledge*. London: Routledge.
1994 *Museums and Their Visitors*. London: Routledge.
2001 *Cultural Diversity: Developing Museum Audiences in Britain*. Leicester: Leicester University Press.
- Kaplan, Flora E. S.
1995 *Museums and the Making of 'Ourselves.'* Leicester: Leicester University Press.
- Karp, Ivan, and Steven D. Lavine
1991 *Exhibiting Cultures: The Poetics and Politics of Museum Display*. Washington, DC: Smithsonian Institution Press.
- Kreps, Christina F.
2003 *Liberating Culture: Cross-Cultural Perspectives on Museums, Curation, and Heritage Preservation*. London: Routledge.
- Lindauer, Margaret
2006 *The Critical Museum Visitor*. In *New Museum Theory and Practice: An Introduction*. J. Marstine, ed. Pp. 203–225. Malden: Wiley-Blackwell.
- Lord, Barry, and Gail Lord, eds.
2002 *The Manual of Museum Exhibitions*. Walnut Creek, CA: AltaMira Press.
- Macdonald, Sharon, ed.
1998 *The Politics of Display*. London: Routledge.
- Macdonald, Sharon, and Gordon Fyfe
1996 *Theorizing Museums*. Oxford: Blackwell.
- MacGregor, Arthur
2007 *Curiosity and Enlightenment: Collecting and Collections from the Sixteenth to the Nineteenth century*. New Haven: Yale University Press.
- MacLeod, Suzanne, ed.
2005 *Reshaping Museum Space: Architecture, Design, Exhibitions*. London: Routledge.
- McLoughlin, Moira
1999 *Museums and the Representation of Native Canadians*. New York: Garland Publishing.
- Metzler, Sally
2008 *Theatres of Nature: Dioramas at the Field Museum*. Chicago: Field Museum of Natural History.
- Moore, Kevin
1997 *Museums and Popular Culture*. London: Cassell.
- Moser, Stephanie
1999 *The Dilemma of Didactic Displays: Habitat Dioramas, Life-Groups and Reconstructions of the Past*. In *Making Early Histories in Museums*. N. Merriman, ed. Pp. 65–116. London: Cassell/Leicester University Press.
2001 *Archaeological Representation: The Visual Conventions for Constructing Knowledge*

- about the Past. In *Archaeological Theory Today*. I. Hodder, ed. Pp. 262–283. Cambridge: Polity Press.
 - 2003 Representing Human Origins: Constructing Knowledge in Museums and Dismantling the Display Canon. *Public Archaeology* 3(1):1–17.
 - 2006 Wondrous Curiosities: Ancient Egypt at the British Museum. Chicago: Chicago University Press.
 - 2008 Archaeological Representation: The Consumption and Creation of the Past. In *Oxford Handbook of Archaeology*. B. Cunliffe and C. Gosden, eds. Pp. 1048–1077. Oxford: Oxford University Press.
- Pearce, Susan M., ed.
- 1994 Interpreting Objects and Collections. Routledge: Leicester Readers in Museum Studies.
- Pearce, Susan M.
- 1998 Museums, Objects and Collections. Leicester: Leicester University Press.
- Peers, Laura, and Alison K. Brown, eds.
- 2003 Museums and Source Communities: A Routledge Reader. London: Routledge.
- Quinn, Stephen C.
- 2006 Windows on Nature: The Great Habitat Dioramas of the American Museum of Natural History. New York: Harry N. Abrams.
- Roberts, Lisa C.
- 1997 From Knowledge to Narrative: Educators and the Changing Museum. Washington, DC: Smithsonian Institution Press.
- Sandell, Richard, ed.
- 2002 Museums, Society, Inequality. London: Routledge.
- Scott, Monique
- 2007 Rethinking Evolution in the Museum: Envisioning African Origins. London: Routledge.
- Serrell, Barbara
- 1996 Exhibit Labels: An Interpretive Approach. Walnut Creek, CA: AltaMira Press.
 - 2006 Judging Exhibitions: A Framework for Excellence. Walnut Creek, CA: Left Coast Press.
- Sheets-Pyenson, Susan
- 1988 Cathedrals of Science: The Development of Colonial Natural History Museums During the Late Nineteenth Century. Ontario: McGill-Queen's University Press.
- Simpson, Moira
- 1996 Making Representations: Museums in the Post-Colonial Era. London: Routledge.
- Spalding, Julian
- 2002 The Poetic Museum: Reviving Historic Collections. London: Prestel.
- Swain, Hedley
- 2007 An Introduction to Museum Archaeology. Cambridge: Cambridge University Press.
- Vergo, Peter, ed.
- 1990 The New Museology. London: Reaktion Books.
- Walsh, Kevin
- 1992 The Representation of the Past: Museums and Heritage in the Post-Modern World. London: Routledge.
- Witcomb, Andrea
- 2003 Re-Imagining the Museum: Beyond the Mausoleum. London: Routledge.
- Yanni, Carla
- 2005 Nature's Museum: Victorian Science and the Architecture of Display. Princeton: Princeton Architectural Press.